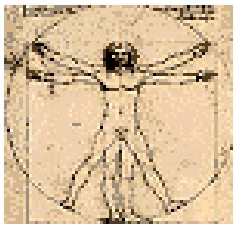

Medical Risk Management

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Treatment for individuals with schizophrenia and a substance abuse disorder

The purpose of this guide is to provide case managers and physicians with information to facilitate treatment of individuals with serious and persistent mental illness who also have co-occurring substance abuse disorder. The guide presents an overview of current research and clinical recommendations for dually diagnosed patients. For the purpose of this guide, we are defining dual diagnosis as individuals with schizophrenia and a co-occurring substance abuse disorder.

Introduction: The term substance abuse is being used here to describe either abuse or dependence on alcohol, marijuana, cocaine or opiates based on DSM IV criteria (See Appendix I. Overview of dependency and abuse). The decision to include all levels of severity is based on the idea that even a small amount of use is problematic for this population. Research suggests that approximately 50% of individuals with schizophrenia have an active substance abuse disorder, and rates are as high as 70% on some inner city community settings. Co-occurring substance abuse is associated with symptom exacerbations and higher use of hospitalization, greater risk for HIV and other medical problems, homelessness and suicidality. Substance abuse creates a barrier to treatment that is often devastating to the individual with the disorder, troubling for the family members, and a burden on the system and providers who care for them. Recognition and management of substance abuse problems in schizophrenia spectrum disorders significantly improve outcomes.

***Point to Case Manager 1*: Poorer outcomes occur when antipsychotic medications are discontinued by substance abusing patients.**

While treatment approaches have become quite sophisticated for dually diagnosed individuals (Drake et al, 2001) research suggests that this population has disproportionately high rates of recidivism, particularly early in recovery. For example, 36% of the dually diagnosed patients referred to a residential treatment facility failed to attend their initial appointment (Nuttbrock et al, 1997). Other studies have found outpatient treatment attrition rates as high as 85% to 92% within the first few months of recovery (Burnam et al, 1995; Rakav et al, 1995). These studies suggest that clinicians should pay close attention to adherence to appointments and medication early in recovery when this population is transitioning across levels of care. Motivational enhancement therapies and case management services can be used to assist with these transitional periods and help the individuals to remain engaged in treatment.

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The facilitation of outpatient treatment engagement will often have a secondary benefit of improving medication adherence, and increasing psychiatric stabilization all leading to better long term outcomes.

Point to Case Manager 2: ***Exacerbation is often incorrectly attributed to other factors when substance abuse goes unrecognized.***

The treatment team may assume a patient is not responding to treatment and either increase or change medications to no avail. It is common for substance abuse to be under-identified or underreported at the time of hospitalization. Urine toxicology screenings can be helpful upon admission and provide an objective finding to be discussed between the clinician and the patient. Cocaine is particularly problematic since individuals with schizophrenia have a higher craving early in recovery, which may explain high relapse rates common among this population. In fact, studies suggest that individuals with schizophrenia and cocaine dependence have a great deal of craving and at high intensity, which persists for at least several weeks after the onset of recovery (Carol et al, 2001; Smelson et al, 2002). Clinicians should regularly discuss cravings and urges with their clients and familiarize themselves with techniques that help to manage the craving state.

Point to Case Manager 3: Nearly all data suggest that atypical antipsychotics are more effective than typical antipsychotic agents in this group.

There is a growing body of literature to suggest that atypical neuroleptics are better than typical neuroleptics because the latter is associated with fewer side effects, a lower incidence of EPS and better management of negative symptoms and cognition, which are all thought to play a role in perpetuating substance use in this population. Furthermore, atypical neuroleptics appear to have anticraving effects for cocaine, alcohol and even nicotine. Studies comparing atypicals to typicals have found better outcomes with olanzapine (Littrell et al, 2001; Smelson et al, 2004) risperidone (Albanese et al, 2001; Smelson et al, 2002) and clozapine (Green et al, 2003; Zimmet et al, 2000) in patients with co-occurring schizophrenia and addiction. There are also currently studies underway with Aripiprizol and Seroquel for this population. While the literature does not support a preferred atypical agent, there is sufficient research to suggest the use of an atypical over a typical agent.

Point to Case Manager 4: ***Poorer outcomes occur when patients with co-morbidities are treated with benzodiazepines other than for acute detoxification. Sedative hypnotic medications should similarly be avoided.***

The use of benzodiazepines in this population should be avoided since they are abusable and they are sedating, and can produce memory problems or amnesia. The sedating/ amnesic effects can be synergistic with drugs and alcohol. If benzodiazepines cannot be avoided, abuse potential can be reduced in the way they are used. Those with a slower onset of action and longer half-life, such as chlordiazepoxide (Librium) or clonazapam (Klonopin), will have less potential for abuse. The extended-release formulation of alprazolam (Xanax XR) has great advantage over immediate-release alprazolam in terms

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of less drug-liking and abuse potential (Mumford et al. 1995). Medications without abuse potential are always preferred for the treatment of anxiety, depressive disorders, and sleep problems among individuals with a co-morbid substance abuse disorder. Non-benzodiazepines including SSRIs and buspirone (Buspar) would appear to offer both efficacy and safety to this group. Buspirone does not produce additive sedation or psychomotor impairment when combined with alcohol & drugs. Sertraline (Zoloft) and fluoxetine (Prozac) have been tested in numerous controlled clinical trials in alcohol, opioid, cannabis and cocaine users without schizophrenia and appear to be safe in patients actively using these substances. We caution the use of fluvoxamine (Luvox) in methadone maintenance patients because it can raise significantly methadone levels and risk overdose (Luvox is not currently on the market).

Point to Case Manager 5: Psychosocial substance abuse treatment programs designed for individuals with schizophrenic spectrum disorders markedly improve outcome. Abstinence oriented support groups can also be helpful as adjunctive treatment or when a dedicated program is not available.

Effective dual diagnosis programs combine or integrate mental health and substance abuse interventions that are tailored for the complex needs of this population. *Integrated interventions* are specific treatment strategies or therapeutic techniques in which interventions for both disorders are combined in a single session or interaction, or in a series of interactions or multiple sessions. Integrated interventions can include a wide range of techniques. There are also 12-step therapy groups for individuals with a mental illness and substance abuse disorder, called Double Trouble Groups. These are similar to AA/NA, but have the advantage of the mental health issues that also play a role in recovery. Some examples of integrated treatments are listed below:

- Integrated screening and assessment processes
- Double Trouble mutual self-help meetings
- Dual recovery groups (in which recovery skills for both disorders are discussed)
- Motivational enhancement interventions (individual or group) that address issues related to both mental health and substance abuse or dependence problems
- Group interventions for persons with a mental disorder, and a substance use disorder
- Combined psychopharmacological interventions, in which an individual receives medication designed to reduce cravings for substances as well as medication for a mental disorder.

Point to Case Manager 6: Individuals with co-morbidity are especially vulnerable to homelessness and unstable housing. Geographic continuity is essential to successful intervention and requires close coordination between clinic, hospital and social services.

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(1) Incidents and impact

The epidemiological Catchment Area Study found that approximately 50% of individuals with schizophrenia have co-occurring alcohol or other drug use disorders (Rogier et al, 1990). This study also found that as compared to the general population, individuals with schizophrenia are three times more likely to have an alcohol use disorder and more than six times more likely to have a drug use disorder. In certain settings the incidence of substance abuse among individuals with schizophrenia is higher. For example, Ziedonis (1996) examined consecutive admissions to an inner city Community Mental Health Center in New Haven, Connecticut and found that over 70% of the individuals with schizophrenia had a co-occurring substance abuse disorder. Co-occurring substance abuse increases psychiatric symptoms, impulsivity, suicide, cognitive impairment, homelessness, family discord, legal problems, medical problems and results in an increased risk for medical problems including HIV and hepatitis (Canton et al, 1994; Cuffel et al, 1994; Haywood et al, 1995; Rosenberg et al, 2001; Serper et al, 1995; Smelson et al 2002; Soyka et al, 2001) compared to their non substance using counterparts. These multiple psychosocial problems that occur in this population often present unique diagnostic and treatment challenges for providers.

(2) Assessment

It is often difficult to accurately assess the severity of the substance abuse in individuals with schizophrenia spectrum disorders even for the most seasoned clinicians. These individuals are often poor historians and rarely present with an individual who can provide collateral information. Furthermore, substance abuse can cause a wide range of psychotic symptoms that may occur during acute intoxication, withdrawal, or chronic use. Individuals with psychotic disorders experience psychiatric symptoms following smaller and briefer exposures to drugs of abuse than other substance abusers. The following sections describe symptoms and the substances most often associated with them. While a complete review is outside the scope of this guide, a summary of symptoms and drugs associated with them follows.

Delusions: Delusions, paranoid or grandiose, are most often associated with psychostimulant abuse including amphetamines and cocaine. They initially occur most often after an escalating period of use (speed run) and are more likely to emerge when the route of administration is by smoking (inhalation) or injection. Once drug induced delusions have occurred, even small quantities and brief exposure are frequently sufficient to precipitate a recurrence. Treatment is usually supportive but the schizophrenic patient may present hospitalization or require high doses of antipsychotic medication.

Paranoia: Paranoia often accompanies repeated and chronic marijuana use. A significant proportion of individuals with schizophrenia regularly use marijuana, and it may contribute to a perception of partial response or residual symptoms. Psychostimulants (as noted above) are also associated with paranoid states.

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Hallucinations: Visual hallucinations may occur as part of alcohol withdrawal. This medically serious and potentially life threatening condition known as delirium tremens, may be accompanied by changes in consciousness, disorientation, agitation and seizures. Delirium tremens (DTs) constitutes a true medical emergency, and individuals in whom this is suspected should be referred for immediate medical evaluation. Flashbacks, i.e. vivid visual re-experiencing of actual events may occur days or years following hallucinogen use. Auditory hallucinations are less frequent but may occur as part of a stimulant induced psychosis.

Anxiety: Anxiety accompanies a wide range of intoxications and withdrawal syndromes. It is common during withdrawal from alcohol and sedative-hypnotics. Such withdrawal may be inadvertent or iatrogenic, as when patients are admitted to a hospital and their use of alcohol or benzodiazepines is unknown or undocumented. Seizures may be a significant risk in these individuals. Anxiety, agitation, diaphoresis and abdominal cramping occur during opiate withdrawal. Stimulants, marijuana and hallucinogens can all cause significant anxiety in susceptible individuals.

Insomnia: This is most often seen during acute intoxication with stimulants, hallucinogens and PCP.

Point to Case Manager 7: When substance abuse is suspected, it is important to gather all available information including hospital records, collateral interviews and repeated clinical interviews.

A review of hospital records and collateral information can reduce the problems of poor memory, confusion and inconsistent reporting. Similarly, a more complete and forthright history may be obtained when the interview is repeated after acute phase symptoms have resolved. The substance abuse history is most helpful when it identifies:

1) The amount and frequency of each drug used
2) The amount spent for each drug on a recurring basis (per day, per week)
3) Information on periods of abstinence
4) Triggers and cues for drug use
5) Severity of drug cravings
6) Presence of cognitive impairments
6) Medical problems related to substance abuse
7) Family history of psychiatric and substance use disorders.
8) History of suicide attempts or hospitalizations for suicidal ideation

A sample substance abuse screening tool is attached (Appendix II). We suggest that clinicians evaluate craving using a brief scale that is specific for the individual's drug of choice or to simply ask the individual how strong is their desire to use now and when they leave the treatment facility. Cognitive assessment should include orientation, attention, and memory tasks. A variety of more sophisticated instruments exist to evaluate cognition if impairment is identified.

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<u>Point to Case Manager 8</u>: Suicide is a major cause of death in individuals with co-morbidities. Suicidal risk should be carefully evaluated and documented at every appointment in schizophrenic patients with current or past history of substance abuse.

A past history or presence of substance or alcohol abuse markedly increases the risk of a suicidal event. In the InterSePT study, individuals with co-occurring disorders were at 60% greater risk of suicide attempts and completions than those without substance abuse. Substance abuse was the single greatest predictor for suicidal behavior.

(3) Integrated Care.

Integrated treatments that manage both disorders concurrently are recommended for this population to prevent service fragmentation and improve outcomes (Drake et al, 2002; *SAMHSA's Report to Congress (2002); the President's New Freedom Commission Report on Mental Health (2003*). Individuals with schizophrenia often have poor outcomes in non-integrated addiction oriented treatment settings because of the stress associated with a confrontational approach. Furthermore mental health programs that do not offer specialized addiction services tend to follow-up less regarding the addiction and more passively manage the substance abuse problem. The main advantage of integrated treatment programs for this population is that they have specialized services to treat the addiction related problems along with the fluctuations in positive and negative symptoms of schizophrenia, cognitive limitations, lack of social support, suicidal ideation. These integrated treatments often include motivational enhancement to address the low motivation for recovery, non-compliance, and apathy common among this population.

<u>Medications:</u> While there is a substantial body of research supporting the use of atypical neuroleptics to treat individuals with schizophrenia, few studies have focused specifically on the treatment of dually diagnosed patients. This population has also been excluded from participating in registration trials, which are necessary before the FDA can approve medications. In spite of the absence of much available data with this population, the small studies, consensus recommendations and clinical experiences support the use of atypical neuroleptics over typical neuroleptics (Buckley et al, 1994; Buckley et al, 1998; Drake et al, 1998; Green et al, 2002; Yovell et al, 1994). Atypical neuroleptics have the advantage of offering a lower side effect profile and better efficacy in improving cognition and in managing the negative symptoms of schizophrenia. There have also been several recent studies that have shown that atypical neuroleptics reduce drug craving among individuals with schizophrenia (Smelson et al, 2002; Smelson et al, 2004). While we are unable to make any recommendations about which atypical agent should be first line, olanzapine, risperidol and clozapine have all shown a great deal of efficacy to date.

Certain medication classes that have known addictive properties should be avoided whenever possible since they could exacerbate an existing substance abuse problem. Furthermore, for those individuals who have maintained some level of sobriety, these classes should also be avoided as they will most likely lead back to substance abuse. The most notable medications to avoid include benzodiazepines, narcotics and hypnotics. Although it is not on label use, clinicians are often reporting that they safely use a low dose of an atypical neuroleptic to manage sleep and anxiety problems among individuals

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with a co-occurring substance abuse disorder. However, the addicted individual often finds that these medications are less effective and might request a benzodiazepine or hypnotic, which they have been prescribed in the past. Careful patient education on the role of these medications in setting off the addictive process will be important to discuss with the patient and is well worth the initial investment in time.

Psychosocial Treatments: It is particularly important to provide comprehensive psychosocial approaches to assist with treatment engagement and to foster community integration. There are a variety of integrated treatment approaches that have been developed to date to manage both substance abuse and psychiatric conditions simultaneously (Bellack et al, 2002; Drake et al, 1998; Minkoff et al, 1989; Ries, 1993; Shanner et al, 1997; Ziedonis et al, 1997). These approaches often blend traditional addiction treatments (relapse prevention, motivational enhancement therapy (MET), and 12-step Facilitation) with mental health approaches (cognitive-behavioral therapy and social skills training). As previously mentioned, many of these approaches incorporate motivational enhancement therapy as the foundation to assist with the initial treatment engagement that is often difficult for this population. The approaches listed above only differ in terms of their emphasis on a particular theoretical orientation or approach, and all focus on managing the addictive disorder simultaneously. However, because of the high attrition rate common among this population, particularly early in recovery, assertive outreach is also necessary.

Case Management**:** Treatment attrition is striking among individuals with schizophrenia who abuse substances and significantly impedes successful outcomes (Bartels & Drake, 1996; Blankertz & Cnaan, 1994; Hanson et al, 1990). Studies have reported treatment completion rates that range from 15% to 33% (Rahav et al, 1995; Burnam et al, 1995; Bennet et al, 2001), with one study reporting the successful transition of only 8% of patients from residential to outpatient treatment (Bennet et al, 2001). High attrition is also common prior to treatment initiation, with a recent study showing a preadmission attrition rate of 36% among the 694 patients (Nuttbrock et al, 1997).

Case management was developed to bridge gaps in the fragmented mental health system and to establish successful community reintegration. Assertive Community Treatment (ACT) is a comprehensive intervention that combines features of earlier models with the direct and on-going provision of services using a multi-disciplinary team approach generally under the direction of a psychiatrist (Johnson et al., 1999). ACT services also include community outreach, 24-hour support, and help with symptom management. A low client-to staff ratio has been identified as one of the most critical components of the model (McGrew, Pescosolido, & Wright, 2003). Short term case management models are also beginning to be developed to reduce the often overburdened ACT programs and provide time-limited transitional support while individuals are transitioned from the hospital to the community. These programs have the advantage of being cost effective by delivering services to large numbers of individuals because they are brief and fostering community integration and independence (Rosenheck et al, 2000; Smelson et al, 2004; Smelson et al, 2004). These case management treatments must always involve co-occurring substance abuse and mental health treatment either embedded in the case management program or as an add-on service. The majority of the existing dually diagnosed

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services offer Motivational Enhancement, Relapse prevention, psychoeducational skills training to assist and referrals to 12-step therapy.

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